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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,182	10/21/2003	Lcc Shombert	CISCP836	3936
26541	7590	09/21/2007		
Cindy S. Kaplan P.O. BOX 2448 SARATOGA, CA 95070			EXAMINER KEEFER, MICHAEL E	
			ART UNIT 2154	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/690,182

**Applicant(s)**

SHOMBERT ET AL.

**Examiner**

Michael E. Keefer

**Art Unit**

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 10/21/2003.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. This Office Action is responsive to the Application filed 10/21/2003.

***Claim Objections***

2. Claims 1, 7, 8, and 15 are objected to because of the following informalities: in the last line of claims "the source." is mentioned. This lacks antecedent basis, and the Examiner suggests deleting this phrase and replacing it with --a source of the packets.--  
Claims 2-6 and 9-14 are objected to for the being dependent upon claims 1 and 8.

Appropriate correction is required.

3. Claims 16 and 17 are objected to because of the following informalities: claims 16 and 17 use the phrase "the destination address" in the 4th paragraph of each claim. This phrase lacks antecedent basis. The Examiner suggests replacing this phrase with the phrase --a destination address of the packets--. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 6 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Based upon the specification and drawings submitted by applicant, it appears that the statement that the first network is a DCC was actually meant to specify that the second network is a DCC.

In the specification, the second network is always referred to as a DCC, i.e. the network where the network elements' addresses are hidden from members of the first network. (See Figs 1 and 4 and their description in the specification.) Since there is no mention of the first network ever being a DCC in the specification, the examiner is interpreting claims 6 and 14 to be referencing the second network as a DCC instead of the first network.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 15-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Wootton et al. (US 6128298), hereafter Wootton.

Regarding **claim 15**, Wootton discloses:

A gateway network element (Fig. 1, IP Filter 12) that provides access to network elements (Fig. 1, 18) that are not directly reachable, comprising:

a processor that is directed by code; (the IP filter must have a processor directed by code.)

code that receives and sends packets over a first IP based interface to a first network; (Fig. 1, interface 18 on IP filter 12)

code that receives and sends packets over a second IP based interface to a second network, (Fig. 1 interface 20 in IP filter 12) wherein IP addresses of

network elements in the second network are not visible to network elements in the first network; (Col. 5 lines 9-12 disclose that the IP addresses of the private network elements are not known in the public network)

code that sends packets over the first IP based interface only when the packets specify the gateway network element as the source. (Col. 5 lines 37-55 disclose that packets destined for the public network (i.e. the first interface) have the private IP address information removed from the packet so that the packet appears to have come from the filter.)

Regarding **claim 16**, Wootton discloses:

A gateway network element (Fig. 1, IP Filter 12) that provides access to network elements (Fig. 1, 18) that are not directly reachable, comprising:

a processor that is directed by code; (the IP filter must have a processor directed by code.)

code that receives and sends packets over a first IP based interface to a first network; (Fig. 1, interface 18 on IP filter 12)

code that receives and sends packets over a second IP based interface to a second network, (Fig. 1 interface 20 in IP filter 12) wherein IP addresses of network elements in the second network are not visible to network elements in the first network; (Col. 5 lines 9-12 disclose that the IP addresses of the private network elements are not known in the public network)

code that accepts packets received over the first IP based interface if the destination address specifies the gateway network element, a subnet broadcast

address or a multicast address. (Col. 5 lines 16-20 state that all incoming traffic from the public network to the private network addresses the IP filter, thus it accepts packets on the public interface that specify the destination as the IP filter.)

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-3 and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wootton et al. (US 6128298) hereafter Wootton in view of Civanlar et al. (US 5805805), hereafter Civanlar.

Regarding **claims 1 and 7-8**, Wootton discloses:

A gateway network element (Fig. 1, IP Filter 12) that provides access to network elements (Fig. 1, 18) that are not directly reachable, comprising:

a processor that is directed by code; (the IP filter must have a processor directed by code.)

code that receives and sends packets over a first IP based interface to a first network; (Fig. 1, interface 18 on IP filter 12)

code that receives and sends packets over a second IP based interface to a second network, (Fig. 1 interface 20 in IP filter 12) wherein IP addresses of network elements in the second network are not visible to network elements in

the first network; (Col. 5 lines 9-12 disclose that the IP addresses of the private network elements are not known in the public network)

Regarding **claims 2 and 9 as applied to claims 1 and 8**, Wootton discloses:

code that sends packets over the first IP based interface only when the packets specify the gateway network element as the source. (Col. 5 lines 37-55 disclose that packets destined for the public network (i.e. the first interface) have the private IP address information removed from the packet so that the packet appears to have come from the filter.)

Regarding **claims 3 and 10 as applied to claims 1 and 8**, Wootton discloses:

code that accepts packets received over the first IP based interface if the destination address specifies the gateway network element, a subnet broadcast address or a multicast address. (Col. 5 lines 16-20 state that all incoming traffic from the public network to the private network addresses the IP filter, thus it accepts packets on the public interface that specify the destination as the IP filter.)

Wootton discloses all the limitations of claims 1-3 and 7-10 except for filtering packets out that arrive on the second interface which indicate the gateway as the source.

The general concept of filtering out packets that indicate that the packet originated at the network element doing the filtering is well known in the art as taught by Civanlar. (Col. 12 lines 55-58 teach dropping packets that originated from the network element.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Wootton with the general concept of filtering out packets that indicate that the packet originated at the network element doing the filtering as taught by Civanlar in order to decrease network traffic by removing duplicate packets from the network.

10. Claims 4 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wootton and Civanlar as applied to claims 1 and 8 above, and further in view of Daude et al. (US 6892235), hereafter Daude.

Wootton and Civanlar teach all the limitations of claims 4 and 12 except for the use of a proxy server in the gateway (firewall/filter).

The general concept of using a SOCKS proxy server within a firewall, packet filter, or gateway is well known in the art as taught by Daude. (Col. 3 lines 51-64 teach the use of a SOCKS proxy server within a firewall.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Wootton and Civanlar with the general concept of using a SOCKS proxy server within a firewall, packet filter, or gateway as taught by Daude in order to allow users of the private network better access to Internet services.

11. Claims 5-6 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wootton and Civanlar as applied to claims 1 and 8 above, and further in view of Semaan et al. (US 7181534), hereafter Semaan.

Wootton and Civanlar teach all the limitations of claims 5-6 and 13-14 except for the first network being a DCN and the second network being a DCC.



The general concept of using a gateway for address translation and security (i.e. the system of Wootton and Sivanlar) between a DCN and DCC is well known in the art as taught by Semaan. (Fig. 1 teaches a DCN and DCC coupled with a gateway element. The GNE performs address translation and security between the IP DCC 105 and the IP ADCN 104.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Wootton and Civanlar to be used in the network taught by Semaan in order to further increase security between the DCC network and the DCN.

12. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wootton and Civanlar as applied to claim 8 above, and further in view of Vu.

Wootton and Civanlar teach all the limitations of claim 11 except for accepting packets from the private network that are addressed as being destined to the gateway.

The general concept of a firewall, filter or gateway accepting packets destined to it from the private network is well known in the art as taught by Vu. (Col. 8 lines 38-50 teach a gateway accepting packets from the private network that are addressed as being destined for the gateway.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Wootton and Civanlar with the general concept of a firewall, filter or gateway accepting packets destined to it from the private network as taught by Vu in order to allow the use of a UNIX device as the IP filter.

13. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wootton as applied to claim 16 above, and further in view of Vu.

Wootton discloses all the limitations of claim 17 except for accepting packets from the private network that are addressed as being destined to the gateway. (Claim 17 recites substantially the same subject matter of claim 16, thus the same reasons for rejection that apply for the rejection of claim 16 also apply for claim 17.)

The general concept of a firewall, filter or gateway accepting packets destined to it from the private network is well known in the art as taught by Vu. (Col. 8 lines 38-50 teach a gateway accepting packets from the private network that are addressed as being destined for the gateway.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Wootton with the general concept of a firewall, filter or gateway accepting packets destined to it from the private network as taught by Vu in order to allow the use of a UNIX device as the IP filter.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael E. Keefer whose telephone number is (571) 270-1591. The examiner can normally be reached on Monday through Friday 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2154

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MEK 9/14/2007



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